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**From:** Grant Duque [Grant.Duque@intusurg.com]  
**Sent:** 6/12/2019 4:45:08 PM  
**To:** Nicky Goodson [Nicky.Goodson@intusurg.com]  
**CC:** Disha Peswani [Disha.Peswani@intusurg.com]; Tim Limon [Tim.Limon@intusurg.com]  
**Subject:** RE: Extended life project

Ah – in that case then your original estimate's below are more likely.

My guess:

Prograsp, Cadriere: mid- 20's

MSCND: low 20's

FBF & LND – high teens

Tim has some estimates as well, based on field data.

-grant

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**From:** Nicky Goodson <Nicky.Goodson@intusurg.com>  
**Sent:** Wednesday, June 12, 2019 2:36 PM  
**To:** Grant Duque <Grant.Duque@intusurg.com>  
**Cc:** Disha Peswani <Disha.Peswani@intusurg.com>; Tim Limon <Tim.Limon@intusurg.com>  
**Subject:** RE: Extended life project

Let me clarify/confirm. I know how many lives we test for life testing, but we typically don't get failures in life testing.

I'm asking how many lives do we anticipate the instruments completely failing. Are those the same as the numbers below?

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**From:** Grant Duque <Grant.Duque@intusurg.com>  
**Sent:** Wednesday, June 12, 2019 2:20 PM  
**To:** Nicky Goodson <Nicky.Goodson@intusurg.com>  
**Cc:** Disha Peswani <Disha.Peswani@intusurg.com>; Tim Limon <Tim.Limon@intusurg.com>  
**Subject:** RE: Extended life project

Hi Nicky,

Disha already caught me in the aisle.

Cold-graspers: 15 lives

Bipolars: 12 lives

Needle Drivers: 15 lives

The number of life-test lives required to qualify the above depends on the sample size, but if we are using qty22 samples, then the number is 1 to 1 per Tim's Weibull calculation.

-grant

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**From:** Nicky Goodson <Nicky.Goodson@intusurg.com>  
**Sent:** Wednesday, June 12, 2019 1:33 PM

**To:** Grant Duque <Grant.Duque@intusurg.com>  
**Cc:** Disha Peswani <Disha.Peswani@intusurg.com>  
**Subject:** RE: Extended life project  
**Importance:** High

Grant,

Before I interject, can you confirm my estimates. Based on the instruments does it seem reasonable to expect the following failure points:  
Prograsp mid-high 20's  
FBF & Cadiere - early 20's  
MSCND & LND – high teens

Does that sound right?

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**From:** Bob Desantis <Bob.DeSantis@intusurg.com>  
**Sent:** Wednesday, June 12, 2019 12:21 PM  
**To:** Disha Peswani <Disha.Peswani@intusurg.com>; Grant Duque <Grant.Duque@intusurg.com>; Anthony McGrogan <Anthony.McGrogan@intusurg.com>; Nicky Goodson <Nicky.Goodson@intusurg.com>  
**Subject:** RE: Extended life project

I don't need to meet, but I am interested in the overall project plan. When will these tasks be complete? I assume we're running to failure and will statistically back-in to what our life qualification is?

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Bob DeSantis  
203.400.7870

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**From:** Disha Peswani <Disha.Peswani@intusurg.com>  
**Sent:** Wednesday, June 12, 2019 2:05 PM  
**To:** Bob Desantis <Bob.DeSantis@intusurg.com>; Grant Duque <Grant.Duque@intusurg.com>; Anthony McGrogan <Anthony.McGrogan@intusurg.com>; Nicky Goodson <Nicky.Goodson@intusurg.com>  
**Subject:** RE: Extended life project

Hi Bob,

Below is the update on Instrument life extension project. Please let me know if you would like me to set up a meeting to discuss this project.

Project: MCF-19-004- Instrument Life Extension  
TLTP: 1059148-01T

Instrument PN	Instrument Description	Protocol Status	Test instrument procurement	Current Life test status (as of 6/10)	Notes



<b>470049-06</b>	Cadiere	Released 862221-02P	Complete & delivered to NPV lab	6	SSU Testing started on 20th May
<b>470093-11</b>	ProGrasp	Released 862214-03P	Complete & delivered to NPV lab	11	SSU Testing started on 1st May
<b>470205-17</b>	FBF	Released 862223-03P	Complete & delivered to NPV lab	0	Waiting release of C233503- NPV group found out that testers have been testing 250 tissue lifts instead of 300; This ECO is updating the procedure sequence; ECO to release this week.
<b>470006-12</b>	LND	On Hold due to Tungsten filament project	On Hold due to Tungsten filament project	0	Waiting slack issue resolution
<b>470309-14</b>	MSCND		No	0	There is a MCF project for MSCND to update to MIM grips; Plan is to test the MIM grip version for life extension; MIM grips version is expected to release in July;
<b>470172-16</b>	MBF	NA	NA	NA	Covered by FBF

Thanks,  
Disha

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**From:** Bob Desantis <[Bob.DeSantis@intusurg.com](mailto:Bob.DeSantis@intusurg.com)>

**Sent:** Wednesday, June 12, 2019 10:37 AM

**To:** Disha Peswani <[Disha.Peswani@intusurg.com](mailto:Disha.Peswani@intusurg.com)>; Grant Duque <[Grant.Duque@intusurg.com](mailto:Grant.Duque@intusurg.com)>; Anthony McGrogan <[Anthony.McGrogan@intusurg.com](mailto:Anthony.McGrogan@intusurg.com)>; Nicky Goodson <[Nicky.Goodson@intusurg.com](mailto:Nicky.Goodson@intusurg.com)>

**Subject:** Extended life project

Disha, can you provide an update on the Extended Core Instrument life program?

Thanks

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Bob DeSantis  
GM & SVP Instruments and Accessories

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